

Docket No. 010110

Serial No. 10/043,695

IN THE CLAIMS

1. (Currently Amended) In a mobile station including a preferred roaming list of wireless communication systems, a system acquisition procedure comprising the steps of:

maintaining a list of unusable wireless communications systems, each entry of a wireless communication system in the list of unusable wireless communications systems including a system identifier and corresponding avoidance criterion ;

selecting a wireless communications system from the preferred roaming list of wireless communication systems in accordance with a predetermined system acquisition sequence, each entry of a wireless communication system in the preferred roaming list including a system identifier;

determining whether the selected wireless communication system is a useable wireless communication system or an unusable wireless communication system; and
~~repeating the step of selecting until a usable system is selected; and~~

attempting to acquire and register with the selected wireless communications system when the selected wireless communication system is determined to be a useable wireless communication system; and

repeating the step of selecting when the selected wireless communication system is determined to be an unusable wireless communication system.

wherein the selected wireless communications system is determined to be an unusable wireless communication system ~~if~~when a system identifier for the selected wireless communication system matches a system identifier in the list of unusable wireless communications systems includes a corresponding system identifier and the corresponding
and when avoidance criterion corresponding to the system identifier in the list of unusable wireless communications systems is satisfied.

2. (Original) The method of Claim 1 wherein each system identifier identifies at least one wireless communications system.

3. (Currently Amended) The method of Claim 2 wherein each wireless system identifier includes a frequency.

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4. (Currently Amended) The method of Claim 1 wherein each wireless system identifier includes a SID/NID pair that uniquely identifies a wireless communications system.

5. (Currently Amended) The method of Claim 1 wherein the step of maintaining comprises the steps of:

detecting a communications failure with a wireless communications system; and

adding a new entry to the list of unusable wireless ~~communications~~ communication systems, the new entry including an identifier of the failed wireless communications system and corresponding avoidance criterion.

6. (Currently Amended) The method of Claim 5 wherein the step of maintaining further comprises the steps of:

assigning an avoidance duration to the detected system failure; and

calculating an avoidance time before which the failed wireless ~~communications~~ communication system is unusable, the avoidance time equal to a current time plus the avoidance duration,

wherein the avoidance criterion includes the avoidance time.

7. (Original) The method of Claim 6 wherein the avoidance criterion is satisfied if the stored avoidance time is greater than the current time.

8. (Original) The method of Claim 7 wherein the step of assigning an avoidance duration comprises the steps of:

maintaining a list of detectable wireless communications failures, each detectable wireless communications failure having a corresponding avoidance duration;

locating the detected system failure in the list of wireless communications failures; and

using the corresponding avoidance duration in the step of calculating.

9. (Currently Amended) The method of Claim 8 wherein the step of detecting includes the step of detecting failed attempts to acquire and register with the selected wireless ~~communications~~ communication system.

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10. (Currently Amended) The method of Claim 9 wherein the steps of selecting and attempting are repeated until the mobile device successfully acquires and registers with the selected wireless communication system.

11. (Currently Amended) The method of Claim 1 wherein the wireless ~~communications~~ communication systems are selected from the preferred systems list in a predetermined order of desirability.

12. (Currently Amended) In a mobile station, a method for marking wireless communications systems as unusable wireless communication systems comprising the steps of:

maintaining a list of unusable wireless communications systems, each entry of a wireless communication system in the list of unusable wireless communications systems including a system identifier and corresponding avoidance criterion;

detecting a communications failure associated with a currently selected wireless communications system; and

adding a record to the stored list of unusable wireless communication systems, the added record including an identifier of the currently selected wireless communications system and corresponding avoidance criterion based on the detected communications failure, wherein the currently selected wireless communications system is unusable while the corresponding avoidance criterion is satisfied.

13. (Currently Amended) The method of Claim 12 wherein each system identifier is associated with at least one wireless ~~communications~~ communication system.

14. (Currently Amended) The method of Claim 12 wherein the step of adding comprises the steps of:

assigning an avoidance duration to the detected communications failure;

calculating an avoidance time before which the failed wireless ~~communications~~ communication system is unusable, wherein the avoidance time is equal to a current time plus the avoidance duration; and

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storing the avoidance time as the corresponding avoidance criterion.

15. (Original) The method of Claim 14 wherein the step of assigning an avoidance duration comprises the step of:

maintaining a list of identified wireless communications failures, each wireless communications failure having a corresponding avoidance duration;

locating the detected system failure in the list of wireless communications failures;
and

using the corresponding avoidance duration in the step of calculating.

16. (Original) The method of Claim 15 wherein at least two avoidance durations stored in the list of identified wireless communications failures have different values.

17. (Currently Amended) A mobile station comprising:

a memory storing a preferred roaming list of wireless communication systems, the preferred roaming list including a first plurality of system identifiers and corresponding acquisition parameters for corresponding wireless communication systems; and

processing circuitry adapted to create and maintain a list of unusable wireless communication systems, the list of unusable wireless communication systems being stored in the memory and including a second plurality of system identifiers and corresponding avoidance criterion for corresponding unusable wireless communication systems,

wherein a selected wireless communications system from the preferred roaming list is determined to be an unusable wireless communication system if it is identified by when a system identifier for the selected wireless communication system matches a system identifier in the list of unusable wireless communication systems and when the corresponding avoidance criterion corresponding to the system identifier in the list of unusable wireless communications systems is satisfied.

18. (Currently Amended) The mobile station of Claim 17 wherein the processing circuitry comprises:

a system determination unit adapted to select wireless communications communication systems from the preferred roaming list in accordance with a predetermined

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system acquisition procedure and attempt to acquire selected wireless communications systems that are usable.

19. (Currently Amended) The mobile station of Claim 18 wherein the processing circuitry is further adapted to detect communications failures with selected wireless ~~communications~~ communication systems, and in response to a detected communications failure, add an entry to the list of unusable systems, the entry including a system identifier for the selected wireless communications system and an avoidance time, the avoidance time indicating a duration during which the selected wireless communications system is unusable.

20. (Original) The mobile station of Claim 19 further including a clock, wherein the memory further includes a list of communications failures, each communications failure having a corresponding avoidance duration, and

wherein the avoidance time equals a current time as measured by the clock plus the avoidance duration for the corresponding communications failure.

21. (Currently Amended) The mobile station of Claim 20 wherein the processing circuitry is further adapted to delete an entry from the list of unusable ~~communications~~ communication systems when the corresponding avoidance time is less than the current time.